

TED (10) 3051

(Revision - 2010)

Reg. No.

Signature :

Third Semester Diploma Examination in Automobile Engineering - March, 2012

PRODUCTION PROCESS OF AUTOMOBILE COMPONENTS

(Maximum Marks : 100)

(Time : 3 Hours)

PART - A

(Maximum Marks : 10)

- I. Answer the following questions in one or two sentences:
1. Define Shrinkage Allowance.
 2. State the term forgability.
 3. Define Arc length in welding.
 4. State the term 'Knurling' operation on lathe.
 5. List any 4 drill bit angles.

Marks

PART - B

(Maximum Marks : 30)

- II. Answer any five full questions.
1. Explain Green sand moulding process and also list 3 advantages.
 2. List 4 advantages and disadvantages of forging.
 3. Explain the Bessemer process with figure.
 4. Distinguish between soldering and brazing.
 5. Write short note on pattern materials.
 6. Describe the spot welding with sketch.
 7. List 4 advantages of CNC machines over conventional machines.

(5 x 2 = 10)

PART - C

(Maximum Marks : 60)

(Answer one full question from each unit)

UNIT - I

- III. a. Describe the cold chamber die casting with figure. (7)
b. Write short notes on: i) Plaster moulding (8) ii) Core prints

- IV. a. Describe the method of manufacturing cast iron using Cupola furnace. (7)
b. Write short notes on: i) Sweep pattern (8) ii) Match plate pattern

UNIT - II

- V. a. Draw and explain the Open hearth process. (7)
b. Distinguish between Hot rolling and Cold rolling with sketch. (8)

OR

- VI. a. Sketch and explain steam drop hammer. (7)
b. Describe the process for making connecting rod of an engine. (8)

UNIT - III

- VII. a. Describe the submerged arc welding process. (7)
b. Explain the thermit welding with sketch. (8)

OR

- VIII. a. Illustrate TIG welding process with sketch. (7)
b. Describe Oxy-acetylene welding process. (8)

UNIT - IV

- IX. a. Explain the principle of thread cutting on a lathe. (7)
b. Discuss the factors considered in the selection of a grinding wheel. (8)

OR

- X. a. Explain the crank and slotted link mechanism in shaper with the help of a sketch. (7)
b. Illustrate the working of NC machine with block diagram. (8)